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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,077	06/20/2003	William H. Fort	PCB105	7049
32047 7590 04/20/2007 GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC 55 SOUTH COMMERICAL STREET MANCHESTER, NH 03101			EXAMINER KRAUSE, JUSTIN MITCHELL	
			ART UNIT	PAPER NUMBER
			3682	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/601,077

Applicant(s)

FORT ET AL.

Examiner

Justin Krause

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-10,12,13 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-10,12,13,23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 16, 2007 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 7, 9, 12, 23, 25, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Smale et al (US Patent 5,566,581).

Smale discloses an actuator comprising:

-A base plate (46)

-A latching lever (34) coupled to the base plate (fig 2) pivotable between first and second positions and comprising a lever bearing surface (the flat surface on the underside, generally 40)

-A stationary bearing surface (in figure 3, above numeral 56)

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-A solenoid (52) coupled to the base plate, comprising a plunger (56) movable between an extended position and a retracted position, in the first position, the plunger is disposed between the lever bearing surface and the stationary bearing surface, in the retracted position of the plunger, the lever is not blocked from pivoting between the first and second positions.

The lever is biased towards one of the first and second positions.

The plunger is biased towards the extended position when the solenoid is in an unenergized state.

A mechanical switch (80) is closed when the lever is in the first or second position.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smale in view of Dörr et al (US Patent 5,379,872).

Smale discloses all of the claimed limitations as described above.

Smale does not disclose one of said lever bearing surface and said stationary bearing surface comprising a roller.

Dörr teaches an actuator with a roller (9), which allows the actuator to move with low forces (Col 4, lines 42-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Smale and add a roller as taught by Dörr to one of, or both of the lever bearing surface (13) and the stationary bearing surface (24) to reduce friction (Col 3, line 15) and allow the actuator to be moved with low forces.

Claims 4, 10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smale in view of Kataumi et al (US Patent 5,421,792).

Smale discloses all of the claimed limitations as described above, including a spring (30) which biases the lever, but does not specify a type of spring.

Kataumi teaches a torsion spring (46) to press a lever in the park position (Col 5, lines 28-32).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Smale and add a torsion spring as taught by Kataumi in order to bias the latching lever towards a park position.

Claims 8, 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smale in view of Mochida (US Patent 4,473,141).

Smale discloses all of the claimed subject matter as described above but does not disclose a wedge shaped portion on the plunger.

Mochida teaches a wedge shaped portion of a plunger (31a) for the purpose of forcing the lever bearing surface towards one of the first and second positions, preventing the lever from being jammed in an intermediate position. (Col 3, lines 49-51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the plunger of Smale with a wedge shaped portion to make the engagement with the lever bearing surface easier by providing a sloped surface for it to travel on and biasing it towards the first or second position, preventing the lever bearing surface from becoming jammed in an intermediate position.

### ***Response to Arguments***

Applicant's arguments filed April 16, 2007 have been fully considered but they are not persuasive.

Applicant argues that Smale does not show a lever and solenoid coupled to a base plate. The 10<sup>th</sup> Edition of Merriam-Webster's Collegiate Dictionary defines "couple" as, "to join for combined effect". The lever is therefore coupled to the base plate 46 as shown in figure 2. Couple is also defined as "to fasten together". The solenoid is fastened to the base plate. Therefore the lever and solenoid are both coupled to the base plate.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK  
4/18/07  
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Thomas R. Hannon  
Primary Examiner